REMARKS/ARGUMENTS

The present application discloses methods and a computer-readable program for providing autonomic, event driven upgrade maintenance of one or more software modules residing on a computer system. In a preferred embodiment, a method begins by detecting a predefined triggering event on the computer system indicative of a potential maintenance issue. Next the computer system connects to an upgrade management server based upon a set of user defined policies residing on the computer system, where the upgrade maintenance server creates a list of recommended upgrade modules to download to the computer system, the list based upon the triggering event and a set of selection policies. The method then downloads a set of recommended upgrade modules corresponding to the list of recommended upgrade modules recommended upgrade modules from the upgrade management server to the computer system, and selectively installs upgrade modules chosen from the list of recommended upgrade modules on the computer system, based upon the set of user defined policies. The user is then notified of the status of the upgrade maintenance operation.

Reconsideration of the application, as amended, is requested. Claims 1, 30, and 54 have been amended. Claim 35 has been canceled previously. No new matter has been added. Claims 1-34 and 35-54 remain in this application.

In section 4 of the Office Action, the Examiner rejects claims 1-54 has being anticipated by Lee et al. US 2004/0031029 A1 (hereinafter Lee). In response, Applicants have amended independent claims 1, 30 and 54 to better distinguish over the cited reference.

More specifically, Applicants have amended independent claims 1, 30, and 54 in the following ways:

1) the second element of claims 1, 30, and 54 now has added the following language "based upon a set of user defined policies residing on the computer system" after the existing phrase "connecting to an upgrade management server". This is supported in the specification of the present invention at page 9, paragraph 27.

- 2) The fourth element of claims 1, 30, and 54 now refers to downloading a "set" of upgrade modules rather than downloading a "list" of the modules. This is supported in the specification of the present invention at page 8, paragraph 23.
- 3) The final element of claims 1, 30, and 54 now has added the following language "based upon a set of user defined policies residing on the computer system" when referring to the selective installation of upgrade modules. This is supported in the specification of the present invention at page 8, paragraph 23.

With regard to the first amendment above, Applicants respectfully submit that the selection policies employed by Lee occur at the upgrade management server, not at the computer system receiving the update (see Lee, Fig. 3, item 306, "database", and related text, e.g., [0035-0038]), as claimed by the present invention as "a set of user defined policies residing on the computer system". This outlines a fundamental difference between Lee and the present invention, wherein Lee drives the upgrade maintenance from the upgrade management server on a periodic basis (see Lee, page 2, paragraph 22) and with human intervention (see administrative console 302, and page 4, paragraph 34), the present invention automatically drives the upgrade maintenance operation from the local server on an event triggered basis (see Specification, page 9, paragraph 26).

With regard to the second amendment above, Applicants respectfully submit that Lee does not actually download the upgrade modules from the upgrade management server, rather Lee passes parameters to the computer systems indicating where in the network the actual update file may be found, then expects the computer system to download its own update. This is be found on page 2, paragraph 22 of Lee, which states:

The update schedule specifies the time when an update for a particular software component in a particular networked device should be performed. Optionally, the update schedule may also include a priority classification for the update. When the scheduled time arrives to update a particular software component on a particular networked device, a software update engine (which may include one or more sub-engines) sends the update parameters regarding the update file, along with any

other parameters relevant to the update, to a local update agent local to the particular networked device on which the software component to be updated is located. The information set includes, for example, parameters indicating where in the network or on the Internet the actual update file may be found and downloaded (emphasis added).

In contrast to Lee, the present invention, in one embodiment, supports downloading the modules themselves from the upgrade server (see Specification, page 8, column 23) to the computer system.

With regard to the third amendment above, Applicants respectfully submit that the selection policies with regard to selectively installing upgrade modules in Lee occur at the upgrade management server, not at the computer system receiving the update (see Fig. 3, item 306, "database", and related text, e.g., [0035-0038]), as claimed by the present invention as "a set of user defined policies residing on the computer system".

Further, Applicants respectfully submit that the first element of claims 1, 30, and 54, namely "detecting a predefined triggering event on the computer system indicative of a potential maintenance issue, the predefined triggering event being triggered by a current operating condition of the computer system" is neither disclosed nor suggested by the Lee reference.

The Examiner states that this element is provided by Lee at Fig. 3, item 308, and page 4, paragraph 37, "notification messages...may be employed to automatically trigger...").

Applicants respectfully submit that element 308 (a notification module) does not reside within the computer system, as in the present invention, but rather resides between the administrative console 302 and the software update engine (i.e., the upgrade management server of the present invention). Further the "trigger" referred to by the Examiner actually occurs after the initial update attempt originally initiated by the software update engine, as described in Lee, page 4, paragraph 37.

Rather than the automated, computer sever initiated, event triggering scheme employed by the present invention, Lee describes a time driven, update operation initiated periodically at the upgrade management server (a.k.a. the software update engine) and requiring the intervention of a human system administrator at an administrative console. This is described on page 4, paragraph 34 of Lee which is reproduced below:

Fig. 3 is an architectural diagram showing, in accordance with one embodiment of the present invention, the various components of the automatic software update system. In Fig. 3, an administrative console 302 is typically employed by the human system administrator to interact with a software update engine 304. Software update engine 304 represents the logic for initiating the transfer, at a scheduled time, of appropriate update parameters to the networked device(s). Thus, one of the main tasks of software update engine 304 is to obtain the update parameters for the software components on the network, present these parameters to the system administrator for selection (if selection and/or filtering is desired), and compile update parameters responsive to the selections made by the system administrator in order to implement the updates selected. Software update engine 304 is discussed in greater detail in Fig. 4 herein.

Applicants respectfully submit that the amendments described above to independent claims 1, 30, and 54 serve to better distinguish the present invention over the cited Lee reference for reasons stated above, and taken together with the existing claimed differences (i.e., the first element of claims 1, 30, and 54) now clearly place independent claims 1, 30, and 54 in condition for allowance.

Applicants further respectfully submit that dependent claims 2-29 depend directly or indirectly from claim 1 above, which for reasons already provided, is now submitted as being in condition for allowance. As a result, claims 2-29 are also now submitted as allowable, and should be passed to issuance.

Applicants finally respectfully submit that dependent claims 31-34 and 36-53 depend directly or indirectly from claim 30 above, which for reasons already provided, is now submitted as being in condition for allowance. As a result, claims 31-34 and 36-54 are also now submitted as allowable, and should be passed to issuance.

In view of the foregoing comments and amendments, the Applicants respectfully submit that all of the pending claims (i.e., claims 1-34 and 36-54) are in condition for allowance and that the application should be passed to issue. The Examiner is urged to call the undersigned at the below-listed telephone number if, in the Examiner's opinion, such a phone conference would expedite or aid in the prosecution of this application.

CERTIFICATE OF ELECTRONIC TRANSMISSION

I hereby certify that this correspondence and any enclosures are being electronically transmitted via EFS-WEB on the date indicated below.

August 6, 2008

(Date)

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Respectfully submitted,

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